

**ABSTRACT**

An image printing apparatus includes a print head for printing images. A microcontroller that includes a wafer substrate is provided. Processor circuitry is positioned on the wafer substrate. Print head interface circuitry is also positioned on the wafer substrate and is connected between the processor circuitry and the print head. The print head interface circuitry is configured to facilitate communication between the processor circuitry and the print head. Bus interface circuitry that is discrete from the print head interface circuitry is connected to the processor circuitry so that the processor circuitry can communicate with devices other than the print head via a bus.

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